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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/700,099	12/11/2000	Bernd Fischer	D078 1090 (41461.0010.0)	2645
26158	7590	11/30/2006	EXAMINER DICUS, TAMRA	
WOMBLE CARLYLE SANDRIDGE & RICE, PLLC ATTN: PATENT DOCKETING 32ND FLOOR P.O. BOX 7037 ATLANTA, GA 30357-0037			ART UNIT 1774	PAPER NUMBER

DATE MAILED: 11/30/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	09/700,099	FISCHER ET AL.	
	Examiner	Art Unit	
	Tamra L. Dicus	1774	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 11 September 2006.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-6 and 9-24 is/are pending in the application.
- 4a) Of the above claim(s) 16-24 is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-6, 9-15 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
 Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
 Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

The objection is withdrawn due to Applicant's amendment.

Claim Rejections - 35 USC § 112

1. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

2. Claims 1-6, 9-15 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.
3. Instant claim 1 as written, recite a "elastomer as a polymeric binder based on at least one polyolefin". The language is unclear because "based on" could mean mixed, blended, or describe the entire polymer as one compound (see instant specification page 2, 3rd and 4th paragraphs). It is not clear if the elastomer is mixed with a polyolefin or added on the elastomer chain and the specification provides no direction on the production of the elastomer used.

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

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Claims 1-4, 6, and 11-13 are rejected under 35 U.S.C. 102(e) as being anticipated by USPN 6,254,956 to Kjellqvist et al.

Kjellqvist teaches a floor covering comprising at least one elastomer as a polymeric binder based on at least one polyolefin with a density $< 0.910 \text{ g/cm}^3$, and at least one grafted copolymer, wherein the grafted copolymer is maleic acid anhydride grafted HD polyethylene and co-crosslinking agent of an acrylate (col. 8, lines 5-18, col. 9, lines 1-15, col. 10, lines 23-68, col. 11, lines 35-65, acrylic acid or acrylonitrile and any combination thereof, Table 2). Claims 1 and 12 are met.

Regarding claim 2, Table 2 of Kjellqvist teaches polyolefin density of 0.871, falling within Applicant's range of $0.85\text{-}0.892 \text{ g/cm}^3$.

Regarding claim 3, Kjellqvist teaches polyolefin selected from very low density (VLD) PE polymers, LLDPE (linear low density polyethylene) and LDPE (low density polyethylene) are considered a synonymous selection.

Regarding claim 4, Kjellqvist teaches a mixture of at least two ethylene copolymers because Kjellqvist requires at least one ethylene and a combination of MAH or PP copolymer blends (col. 11, lines 40-51) and further shows the melt flow index of 30 of a choice polymer in Table 2, meeting Applicant's range of >3 and density requirements are also met, Kjellqvist teaching choice polymer densities of 0.902 and 0.871 g/cm^3 , falling within Applicant's range of $0.89\text{-}0.91$ and $0.86\text{-}0.88 \text{ g/cm}^3$.

Regarding claim 6, Kjellqvist teaches copolymers of ethylene and octane (Table 2).

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Regarding claims 11 and 13, Kjellqvist teaches the floor covering as claimed in Claim 1, wherein the elastomer is cross-linked with at least one cross-linking agent based on an organic peroxide and optionally a co-cross-linking agent and fillers and pigments (col. 7, lines 25-35, col. 8, lines 6-18, and col. 12, line 61 and col. 12, lines 13-col. 13, line 3).

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 5, and 9-10 are rejected under 35 U.S.C. 103(a) as being unpatentable over USPN 6,254,956 to Kjellqvist et al.

Kjellqvist essentially teaches the claimed invention above.

Regarding claims 5, 9-10, Kjellqvist teaches the same materials and recites weight percentages (Tables 1C, Table 2, and Tables 4-9), but does not explicitly recite a weight ratio of 4:1 to 3:2 (instant claim 5) or grafting degree percentage of 1-5 (instant claim 9), or the proportion of grafted copolymer to total weight of polymer binder is 5% to 25% (instant claim 10). However, because the same materials and mixtures are provided, one having ordinary skill in the art would expect the ranges to be an optimizable feature because Kjellqvist teaches many polymeric blends are varied to effectively change melt flow, density and other properties as cited in Tables 2-9, col. 10, lines 23-68, and col. 11, lines 35-65.

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Claims 14-15 are rejected under 35 U.S.C. 103(a) as being unpatentable over USPN 6,254,956 to Kjellqvist et al. as applied to claim 1 above, and further in view of USPN 6,399,689 to Scarlette.

Kjellqvist essentially teaches the claimed invention above.

Regarding claims 14 and 15, Kjellqvist does not show a mixture of filler comprising mineral intergrowths as in instant claim 14. Kjellqvist does not show a variable color pattern and a homogenous design as in instant claim 15.

Kjellqvist teaches a mixture of different fillers is employed and includes alumina (col. 12, lines 30-41).

Scarlette teaches fillers, pigments, and an alumina ceramic grain composition blended into any floor finishing composition for enhancing abrasion resistance without compromising flexibility, hardness, and adhesion (col. 2, lines 30-45, col. 3, lines 35-41) and specifically uses alumina to enhance physical properties when included with mineral particles and teaches aluminates having a crystal structure in platelet shape (col. 5, lines 25-49).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the elastomer floor covering of Kjellqvist to utilize a filler mixture of platelet-shaped and crystalline mineral intergrowths because Scarlette teaches such an alumina filler enhances physical properties and abrasion resistance without compromising flexibility, hardness, and adhesion (col. 3, lines 35-41 and col. 5, lines 25-49).

Further, It would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the elastomer floor covering of Kjellqvist and Scarlette with pigments in a design and mineral intergrowth fillers of a homogenous construction since it is

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known that such a mixture provides decorative color and an effective filler for the flooring to provide for a consistent composition for the flooring as taught above.

Response to Arguments

Applicant's arguments filed 09-11-06 have been fully considered but they are not persuasive.

Applicant argues Kjellqvist does not describe an elastomer and a constituent olefin monomer. However, Applicant has not limited the claims to a constituent as argued. The terms are broadly interpreted, and as written, "based on" is not enough to limit the claims to the structure argued. See again, col. 7, lines 25-35, col. 8, lines 5-18, col. 9, lines 1-15, and col. 12, line 61 col. 12, lines 25-col. 13, line 3 and Tables 1-2.

Scarlette is still used to teach alumina filler enhances physical properties and abrasion resistance without compromising flexibility, hardness, and adhesion (col. 3, lines 35-41 and col. 5, lines 25-49).

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Tamra L. Dicus whose telephone number is 571-272-1519. The examiner can normally be reached on Monday-Friday, 7:00-4:30 p.m., alternate Fridays.


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If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Rena Dye can be reached on 571-272-3186. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

Tamra L. Dicus
Examiner
Art Unit 1774

Nov. 22, 2006


RENA DYE
SUPERVISORY PATENT EXAMINER
Art Unit 1774
11/27/06